Treating Endometriosis with TCM

Endometriosis

Endometriosis is a gynecological medical condition in which endometrial-like cells appear and flourish in areas outside the uterine cavity. The uterine cavity is lined by endometrial cells, which are under the influence of female hormones. These endometrial-like cells in areas outside the uterus (endometriosis) are influenced by hormonal changes and respond in a way that is similar to the cells found inside the uterus. Common sites of endometriosis include the cervix, vaginal-rectal space, ovaries, fallopian tubes, colon and bladder wall.

It has been estimated that endometriosis occurs in roughly 5-10% of women. Although endometriosis is typically diagnosed during the reproductive years (age 25 to 35), the condition probably begins about the time that regular menstruation begins. A woman who has a mother or sister with endometriosis is six times more likely to develop endometriosis than women in the general population. Other possible risk factors include:

- Never giving birth to an infant
- Starting menstruation at an early age
- Having menstrual cycles shorter than 27 days
- Menstrual periods lasting longer than 7 days
- Having a medical condition that prevents the normal passage of menstrual flow
- Experiencing damage to cells that line the pelvis by previous infection

Causes

While the exact cause of endometriosis remains unknown, many theories have been presented to better understand and explain its development.

- **Retrograde menstruation.** This theory suggests that menstrual blood containing endometrial cells flows back through the fallopian tubes, implants and grows in the pelvis or abdominal cavity. While most women may have some retrograde menstrual flow, typically their immune system is able to clear the debris and prevent implantation and growth of cells from this occurrence. However, in some patients, endometrial tissue transplanted by retrograde menstruation may be able to implant and establish itself as endometriosis. Factors that might cause the tissue to grow in some women but not in others need to be studied, and some of the possible causes below may provide some explanation, e.g., hereditary factors, toxins, or a compromised immune system.

- **Müllerianosis.** A competing theory states that cells with the potential to become endometrial are laid down in tracts during embryonic development and organogenesis. These tracts follow the female reproductive (Mullerian) tract as it migrates (downward at 8–10 weeks of embryonic life. Primitive endometrial cells become dislocated from the migrating uterus and act like seeds or stem cells.
• **Coelomic metaplasia.** This theory is based on the fact that coelomic epithelium is the common ancestor of endometrial and peritoneal cells and hypothesizes that later metaplasia (transformation) from one type of cell to the other is possible, perhaps triggered by inflammation.[1] This theory is further supported by laboratory observation of this transformation.

• **Estrogens.** Endometriosis is a condition that is estrogen-dependent and thus seen primarily during the reproductive years. In experimental models, estrogen is necessary to induce or maintain endometriosis. Medical therapy is often aimed at lowering estrogen levels to control the disease. Additionally, the current research into aromatase, an estrogen-synthesizing enzyme, has provided evidence as to why and how the disease persists after menopause and hysterectomy.

• **Transplantation.** It is accepted that in specific patients endometriosis can spread directly. Thus endometriosis has been found in abdominal incisional scars after surgery for endometriosis. It can also grow invasively into different tissue layers, i.e., from the cul-de-sac into the vagina. On rare occasions endometriosis may be transplanted by blood or by the lymphatic system into peripheral organs such as the lungs and brain.

Whatever the etiology, the misplaced endometrial cells then respond to hormonal stimulus just like the endometrium. However, unlike normal cells in the uterus which are shed during menstruation, the misplaced cells outside the uterus stay in place. They sometimes bleed a little bit, but they heal and are stimulated again during the next cycle. This ongoing process leads to symptoms of endometriosis and can cause scars (adhesions) on the tubes, ovaries, and surrounding structures in the pelvis.

**Signs and Symptoms**

Endometriosis can be mild, moderate or severe, and without treatment, it tends to get worse over time. Some women with endometriosis have no signs and symptoms at all, and the disease is discovered only when bits of endometrial tissue are found outside the uterus during an unrelated operation, such as a tubal ligation. Other women may experience one or more of the following signs and symptoms:

• **Dysmenorrhea.** Pelvic pain and sometimes disabling cramping may begin before and extend several days into menstrual period and may include lower back and abdominal pain. Menstrual pain may get progressively worse over time.

• **Pelvic pain at other times.** A major symptom of endometriosis is recurring pelvic pain. Patient may experience pelvic pain during ovulation, a sharp pain deep in the pelvis during intercourse, or pain during bowel movements or urination. Pelvic pain may accompanied by throbbing, gnawing, and dragging pain to the legs or shooting rectal pain and a pulling down sense.

• **Excessive bleeding.** Patient may experience heavy or long uncontrollable menstrual periods with small or large blood clots. Patient may also have premenstrual spotting.

• **Gastrointestinal problems.** Including constipation, diarrhea, and abdominal bloating.

• **Chronic Fatigue, headaches, depression, anxiety, or hypoglycemia (low blood sugar)**
Diagnosis

A health history and a pelvic examination can in many patients lead the physician to suspect endometriosis. Use of imaging tests may identify endometriotic cysts or larger endometriotic areas. It also may identify free fluid often within the cul-de-sac. The two most common imaging tests are ultrasound and magnetic resonance imaging (MRI). Normal results on these tests do not eliminate the possibility of endometriosis. Areas of endometriosis are often too small to be seen by these tests.

The only way to diagnose endometriosis is by laparoscopy or other types of surgery with lesion biopsy. The diagnosis is based on the characteristic appearance of the disease, and should be corroborated by a biopsy. Surgery for diagnoses also allows for surgical treatment of endometriosis at the same time.

Treatment

While there is no cure for endometriosis, in many patients, natural or surgical menopause will abate the process. In patients in the reproductive years, endometriosis is merely managed: the goal is to provide pain relief, to restrict progression of the process, and to restore or preserve fertility where needed.

Hormone Therapy

- **Hormonal contraceptives.** Birth control pills, patches and vaginal ring help reduce the menstrual pain associated with endometriosis by reducing or eliminating menstrual flow and providing estrogen support.
- **Gonadotropin releasing hormone (GnRH) agonists.** These agents block the production of ovarian stimulating hormones, FSH and LH. This action prevents menstruation and dramatically lowers estrogen levels, causing endometrial implants to shrink. While effective in some patients, GnRH agonists such as nafarelin acetate (Synarel) and Depo Lupron, induce unpleasant menopausal symptoms and may lead to osteoporosis over time. A low dose of estrogen may be taken along with these drugs to decrease such side effects. These drugs can only be used for six months at a time.
- **Danazol (Danocrine) and gestrinone.** These are suppressive steroids with some androgenic activity. Both agents inhibit the growth of endometrium and block the production of ovarian stimulating hormones, preventing menstruation and the symptoms of endometriosis. However, their use remains limited as they may cause acne, hirsutism (excessive growth of body hair) and voice changes.
- **Medroxyprogesterone (Depo-Provera).** This injectable drug is effective in halting menstruation and the growth of endometrial implants, thereby relieving the signs and symptoms of endometriosis. Its side effects include weight gain, decreased bone production and depressed mood.
- **Aromatase inhibitors.** Aromatase inhibitors are medications that block the formation of estrogen and have become of interest for researchers who are treating endometriosis. Early studies suggest that aromatase inhibitors are at least as good as other hormonal approaches and may be better tolerated.

Other Medication
• NSAIDs.  NSAIDs are commonly used in conjunction with other therapy. For more severe cases narcotic prescription drugs may be used. NSAID injections can be helpful for severe pain or if stomach pain prevents oral NSAID use.

• Opioid painkillers.  MST (Morphine sulphate tablets) and other opioid painkillers work by mimicking the action of naturally occurring pain-reducing chemicals called endorphins. There are different long acting and short acting medications that can be used alone or in combination to provide appropriate pain control.

Surgery

• Conservative surgery.  Conservative surgery removes endometrial growths, scar tissue and adhesions without removing the reproductive organs. The procedure can be done laparoscopically or through traditional abdominal surgery in more extensive cases. Conservative surgery is the choice of surgery for the patients who are trying to become pregnant.

• Hysterectomy.  In severe cases of endometriosis, a total hysterectomy and the removal of both ovaries may be the best treatment. Hysterectomy alone is also effective, but removing the ovaries ensures that endometriosis will not return. Either type of surgery is typically considered a last resort, especially for women still in their reproductive years.

Possible Complications

The main complication of endometriosis is infertility. Current estimates are that 30-47% of women suffering from endometriosis are infertile and, conversely, that about 30-50% of all infertile women have endometriosis (Dharmananda, 2002). For pregnancy to occur, an egg must be released from an ovary, travel through the fallopian tube, become fertilized by a sperm cell and attach itself to the uterine wall to begin development. Endometriosis can produce adhesions that can trap the egg near the ovary. It may inhibit the mobility of the fallopian tube and impair its ability to pick up the egg. In most cases, however, endometriosis probably interferes with conception in more complex ways.

Other complications include:

• Chronic pelvic pain that interferes with social and work activities
• Endometriomas (large cysts in the pelvis) that may rupture
• Rarely, blockages of the gastrointestinal or urinary tracts
• Recurrence of endometriosis after conservative surgical or medical intervention

Endometriosis in Traditional Chinese Medicine

According to the theories of traditional Chinese medicine, endometriosis is best described by the traditional Chinese category of Blood Stasis syndrome with formation of abdominal lumps. TCM views the body as being traversed by a
network of channels like the circulatory system described in Western medicine. These channels are contiguous and follow very specific pathways, carrying Qi, the vital energy, and the blood to all the organs and tissues of our body, providing warmth and nourishment. Ideally, blood and Qi circulate freely throughout the system. Any blockage or reduction in flow creates a condition known as stasis. In women, Blood Stasis can lead to symptoms such as painful periods, pelvic pain, heavy bleeding, and infertility.

Etiology and Pathogenesis

Blood Stasis is caused by many external and internal factors that occur during and around the time of menstruation. One main cause of Blood Stasis in the lower abdomen is cold. Cold temperatures inhibit proper circulation of Qi and blood, resulting in a physical environment which promotes endometriosis. The two greatest sources of cold are climate and diet. Women often go out in cold weather without being warmly dressed, commonly exposing the legs, neck and head to a chill. This translates to a cooling of the entire system, in the same way a radiator works to cool down a car engine. Diet is another significant source of coldness. Consumption of cold foods and beverages cools down the abdomen, slowing the circulation of blood and energy, and creating conditions of stagnation that can lead to the symptoms of endometriosis. In order to relieve such symptoms as painful periods, it is of paramount importance to emphasize warm foods and beverages, and to avoid all cold foods and beverages.

Physical trauma and emotional stress can also play key roles in women’s reproductive health. Physical trauma, such as pelvic surgery, can interrupt the proper flow of blood and energy through the abdomen, leading to stagnation. Following a surgery, acupuncture and herbs help the body heal itself quickly, minimizing or eliminating scar tissue, another potential cause of stagnation. For example, when we experience stress, we feel tense and our neck muscles tighten up. Though we might only feel the sensation in the neck muscles this tightening is occurring throughout the body, effectively constricting energy and blood flow. Over time, chronic stress leads to stagnation and pain.

TCM believes that endometriosis is not a disease operating alone. The body must be seen as a whole, with each organ depending on another. All factors must be present and functioning properly in order for the reaction to occur.

Pattern Differentiation

Although blood stasis is the primary pattern of endometriosis, there are often other disease-causing factors which are part of the patterns of endometriosis. The TCM diagnosis is differentiated based on the clinical manifestations associated with each case of endometriosis. The timing, location, nature, and severity of pain are taken into account, along with associated symptoms. Following are the most common patterns of endometriosis:

- **Qi Stagnation and Blood Stasis.** The origin of this pattern lies in emotional stress and anxiety. Symptoms of this pattern include: pressure and pain before or during periods, menstrual periods that contain a lot of blood clots, breast distention and tenderness before periods, distending pain under the rib cage before periods, severe lower abdominal pain, abdominal tenderness, aversion to pressure on the abdomen, feeling of frustration, bitter taste in the mouth, dark purple tongue with spots and thin-white tongue coating, and wiry-choppy pulse.
• **Qi Deficiency and Blood Stasis.** The origin of this pattern is chronic illness or constitutional weakness. Symptoms of this pattern include: pressure and pain during or after periods, menstrual periods that are either heavy or scanty, bearing down feeling in the uterus, lower abdominal, abdominal tenderness alleviated by pressure on the abdomen, preference for warmth, loose or soft bowel movements, fatigue, lethargy, pale complexion, easy bruising, feeling of anxiousness and worry, thick-pale tongue body with tooth-marks on the sides and a white-thin tongue coating, and thin-soft-weak pulse.

• **Kidney Deficiency and Blood Stasis.** The origin of this pattern is either a constitutional weakness, or a history of surgical procedures. Symptoms of this pattern include: irregular periods, pressure and pain during or after periods, scanty periods or spotting that include blood clots, a history of infertility or habitual miscarriage, lower abdominal pain, lower back weakness and aches, soreness of hips, legs, and knees, dizziness, ringing in the ears, pale tongue body with thin-white tongue coating, deep-thin-choppy pulse.

• **Cold Retention and Blood Stasis.** The origin of this pattern is a history of exposure to cold, either cold temperatures or the habitual consumption of cold foods, especially during menstruation. Symptoms of this pattern include: watery menstrual period with blood clots, pressure and pain before or during periods, menstrual pain relieved after the periods, nausea or vomiting with severe menstrual pain, lower abdominal pain and tenderness, preference for warmth and aversion to cold, pale complexion, loose stools, pale or purplish tongue with red spots and white tongue coating, and wiry-tight pulse.

• **Heat Obstruction and Blood Stasis.** The origin of this pattern is a history of genital infections; in TCM is considered to be an accumulation of heat toxins in the body. Symptoms of this pattern include: pressure, pain, and fever before, during, or after periods (the more severe the pain, the higher the fever), lower abdominal pain and tenderness that are worse with pressure, preference for cold temperatures, bitter taste in the mouth, dry throat, irritability, anxiety, constipation, pain during intercourse, red tongue with red or purple spots, and wiry-rapid pulse.

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**Treating Endometriosis with TCM**

The goals of TCM treatments for endometriosis are:

• Alleviating pain by increasing blood circulation
• Removing blood stasis and dissolving masses to shrink endometriosis and prevent recurrence of the condition
• Enhancing the immune and endocrine systems by stimulating the autonomic nervous system to help eliminate stray endometrial cells
• Relieving stress and correcting disruptions in the flow of Qi to strengthen and balance general health
• Warming the uterus and regulating menstrual cycles in order to help ovulation and enhance fertility
• Minimizing undesired side effects and accumulated toxicity from medication and invasive procedures.

The treatment plan depends on the pattern differentiation according to the presenting signs and symptoms of individual patients as well as the underlying constitutional imbalances as the root of the conditions. Both acupuncture and Chinese herbs can work to reduce the pain, breakup the old stagnated blood and encourage fresh red flow and promote hormonal balance. Abdominal massage, topical herbal applications, moxibustion, dietary regulation, and exercise including Qi Gong are all useful in the treatment of endometriosis. Patients with mild endometrial symptoms may be
able to use TCM alone to heal naturally from the effects of endometriosis. More severe cases may require both Western and Chinese medicine to have the best prognosis for long-term cessation of symptoms.

**Acupuncture**

It has been found that acupuncture promotes the release of endorphins and other chemicals in the body which assist in healing and pain management. Acupuncture also enhances the immune and endocrine systems by stimulating the autonomic nervous system to help eliminate stray endometrial cells as well as restores renal and adrenal function to correct irregular cycles and helps clear liver stagnation needed to metabolize excess estrogen that feeds endometriosis. Overall, acupuncture calms the endometrial tissue to accept an embryo and support a pregnancy.

In the case of endometriosis, acupuncture treatments mainly focus on alleviating the symptoms of endometriosis by improving circulation of Qi and Blood. It is believed that when the Qi and Blood are out of balance, blocked, or stagnated, illness and pain result. By placing the needles into the areas of disharmony, acupuncture will restore Qi and Blood to balance and allow it to flow freely again, thereby alleviating the symptomatic problems.

In a clinical study on 53 patients with endometriosis, after acupuncture treatment of endometriosis with promoting blood circulation and stasis removing method for 3.5 months, symptoms such as dysmenorrhea and menstrual disorder basically disappeared and ovarian cysts became smaller or disappeared in 38 patients (Zhu & Cheng, 1993).

Each acupuncture point has its own therapeutic importance in the treatment of endometriosis depending on the TCM diagnosis of the individual. In addition to the acupuncture points on the lower abdomen, the points on the hands, arms, legs, feet, and back can be used in the treatment of endometriosis. For example, needling at acupuncture points Sp 10 and Sp 6 was found to have a better therapeutic effect on the model rats with endometriosis, which could down-regulate the abnormal increase of metalloproteinase-2 (MMP-2) levels to inhibit the invasion of ectopic tissue to extracellular matrix, thus reducing the ectopic tissues (Chen et al., 2008). Ear acupuncture therapy has also demonstrated satisfactory curative effects in treating 37 cases of dysmenorrhea due to endometriosis in a clinical research (Xiang et al., 2002).

Electro-acupuncture and/or moxibustion can be used to enhance the effect of acupuncture treatment.

- **Electro-acupuncture.** This procedure uses electric impulse stimulation through the acupuncture needles in affected areas and is utilized in more severe pain conditions of endometriosis. This type of treatment enhances the therapeutic effects of acupuncture. It is a pain-free procedure with a small amount of throbbing and vibration in the affected area.

- **Moxibustion.** Moxibustion is used to create heat and therapeutic effects as a stand-alone or an additional treatment to acupuncture treatment in certain types of endometriosis and pelvic pain conditions. Deep warmth is usually felt after moxibustion in the applied area. Moxibustion increase circulation throughout the pelvic cavity and promote healing.

The treatment of endometriosis with acupuncture usually requires a commitment of enough time to rebalance the body's systems. At least three months of consistent treatment, 1-2 times per weeks, is generally required to treat the
root cause of endometriosis. For the patient with infertility due to endometriosis, six months or longer consistent
treatment may be required. This will vary from one woman to another, and will be dependent on the severity of the
disease. Some women will see a reduction in their symptoms right away while others may take a longer period of time.
Stress levels, lifestyle, and general health are important factors involved in response time.

Herbal Medicine

Chinese Herbs

In TCM gynecology, one of the most important approaches is herbal medicine. Chinese herbs help reduce pain as well as
control and shrink endometriosis. They are targeted to the pelvic region to increase circulation and to eliminate the
growth and recurrence of endometriosis by removing blood stasis and dissolving masses. They are also used to
rebalance hormones as well as heal tissue, and in some cases, herbal remedies also help strengthen the immune system.
Many studies have shown the therapeutic effects of Chinese herbal medicine in the treatment of endometriosis. For
more information, read the article ‘Chinese Herbal Therapy for Endometriosis (Dharmananda, 2002)’.

The most frequently used herbs for dispersing Blood Stasis are: Pu Huang, Wu Ling Zi, San Leng, E Zhu, Chuan Shan Jia,
Chi Shao, Niu Xi, Dan Shen, Chai Hu, Xiang Fu, Tao Ren, Hong Hua, Dang Gui, Chuan Xiong, Gui Zhi, Yan Hu Suo, Xia Ku
Cao, and Chuan Lian Zi.

As with all Chinese Medical treatments, however, the most efficacious results will result from treating the pattern.
Chinese herbs are usually used in combination of 6 to 20 herbs and are customarily prescribed for an individual patient’s
specific condition. It is therefore common to have different herbal prescriptions from patient to patient in endometriosis
condition. Formulas for the treatment of underlying patterns are:

- **Qi Stagnation and Blood Stasis.** This pattern is treated with formulas that regulate Qi, invigorate blood,
  resolve blood stasis, and eliminate pain. The most commonly used formulas for this pattern are Ge Xia Zhu Yu
  Tong, Xiao Yiao San, and Dang Gui Wan.
- **Qi Deficiency and Blood Stasis.** This pattern is treated with formulas that nourish Qi and Blood, promote
  circulation, resolve blood stasis, and eliminate pain. The most commonly used formulas for this pattern are Tao
  Hong Si Wu Tang, Jing Yu Tang, and Bu Yang Huan Wu Tang.
- **Kidney Deficiency and Blood Stasis.** This pattern is treated with formulas that tonify the kidney, replenish
  body essence, resolve blood stasis, regulate blood flow, and diminish pain. The most commonly used formulas
  for this pattern are Gui Shen Wan and Hu Po San.
- **Cold Retention and Blood Stasis.** This pattern is treated with formulas that warm the uterus and meridians,
  expel coldness, improve circulation, resolve stasis, and eliminate pain. The most commonly used formulas for
  this pattern are Shao Fu zhu Yu Tong, Wen Jing Tang, Ton Jing Wan, and Dang Gui Si Ni Tang.
- **Heat Obstruction and Blood Stasis.** This pattern is treated with formulas that cool the excessive heat, activate
  blood circulation, resolve blood stasis, and dissipate pain. The most commonly used formulas for this pattern are
  Xiao Chai Hu Tang and Qing Jing Si Wu Tang.
Herbs can be administered to a patient in many forms. Raw herbs can be taken on a brewed tea form. This herb tea form is stronger and quick acting; however, it takes time for cooking and preparation and the taste can be quite strong initially. The herbs can also be prescribed in many other forms such as powder, capsule, pill, topical and tincture. Herbs possess many strengthening as well as therapeutic effects due to their content of varieties of nutrients and vitamins, which are essential to the body. While an herbal supplement can be very potent, it may also take a few months before the full effects are noticed.

**Other Herbs for Endometriosis**

The following herbs are often used in naturopathic medicine in order to help shrink fibroid tumors by balancing hormone level, regulating menstruation, and reducing inflammation (Kadison, 2009).

- **Chasteberry.** Reduces excess estrogen, balances hormones, reduces inflammation and symptoms of PMS
- **Red raspberry.** Controls excess bleeding, helps replenish lost vitamins and minerals
- **Motherwort.** Relaxes the uterine muscles, prevents cramps, balances hormones
- **Siberian ginseng.** Prevents heavy bleeding
- **Red clover.** Helps the liver in metabolizing excess estrogen
- **Goldenseal.** Reduces inflammation, promotes uterine tissue health
- **Echancia.** Controls benign tumors and reduces inflammation
- **Licorice root (Gan Cao).** Reduces bloating and helps with liver detoxification
- **Black cohosh (Sheng Ma).** Relieves menstrual pain and menopausal symptoms, protects the liver, reduces inflammation
- **Dandelion, Milk Thistle, Yellow Dock Root.** Help metabolize and eliminate excess estrogen

**Nutrition**

In TCM, proper nutrition is considered one of the most important foundations to health and disease prevention. While not a cure for endometriosis, the right diet helps keep the hormone levels balanced, which in turn reduces pain and inflammation. In endometriosis, patients are generally advised to avoid smoking, recreational drugs, caffeine, refined sugar, cold raw foods as well as reduction in dairy products. Increased intake of green vegetables as well as barley and seaweed are also advised. Following guidance are recommended to prevent and reduce further irritation, inflammation and other symptoms of endometriosis.

**What to Eat**

- **Fiber-rich fruits, vegetables, legumes, whole grains.** Estrogen clings to bile acids that move through your intestines, and the hormone is removed from the body during the digestion process. Fibers bind to the bile acids and encourage the flushing process, thus lowering the estrogen levels.
Examples of fiber-rich foods are: fruits such as raspberries, pears, apples, strawberries, bananas, oranges, figs, raisins; vegetables such as artichoke, peas, broccoli, potatoes, carrots, tomatoes; legumes, nuts, and seeds such as almonds, beans, split peas, pecans, pistachio nuts; and whole grains such as brown rice, oatmeal, barley, rye.

- **Cruciferous vegetables.** Cruciferous vegetables such as broccoli, Brussels sprouts, cabbage, cauliflower, Chinese cabbage, collards, kale, mustard, radish, rutabaga, and turnips are high in vitamin C and soluble fiber and contain a chemical known as indole-3-carbinol (C9H9NO), which improves the body's ability to metabolize excess estrogen.

- **Seaweeds.** In Chinese herbal medicine, seaweeds such as Kun Bu and Hai Zao are used to promote blood circulation and eliminate phlegm stasis. In Korea, seaweeds are known as ‘female’s food’ and often consumed before and after menstruation or childbirth. In recent researches have shown that some forms of seaweed have excellent nutritional qualities, and brown seaweed in particular, has been shown to prevent the formation of blood clots, lower cholesterol and halt the growth of tumors. Studies in animals showed that a significant lowering of fats in the liver occurred when seaweed was eaten which has strengthened the belief that seaweed can be a valuable part of a good liver detoxification.

- **Omega-3 Fatty Acids.** Studies have shown that omega-3 reduces the symptoms of endometriosis. (Harel et al., 1996). Omega-3 fatty acids can alleviate menstrual cramping by promoting blood circulation, preventing the formation of blood clots, and reducing excess prostaglandin, the natural agent of the body causing inflammation and cramping of endometriosis. Cold-water oily fish such as salmon, herring, mackerel, anchovies and sardines are good source of omega-3 fatty acids. Fruits, vegetables, seeds and nuts such as flaxseed oil, chia, kiwi, black raspberry, lingo berry (cowberry), hemp seeds, pumpkin seeds, safflower seeds, walnuts, pecans, hazel nuts, and olive oil are another source of omega 3 fatty acids.

- **Soy products.** Soy has been found to help shrink uterine fibroids, as they contain isoflavones and phytoestrogens which help to regulate estrogen levels in the body. Soy products such as tofu, miso, soymilk, or tempeh will be all beneficial in both treating and preventing endometriosis.

**What to Avoid**

- **Red meats, poultry, and dairy products.** These acidic, inflammatory foods are sources of arachidonic acid, which can increase the inflammatory prostaglandins and other inflammatory mediators. Researchers have found that women who eat more than one serving of red meat per day have a 80-90% greater risk for endometriosis. Avoiding the commercial meat products also reduces exposure to the added hormones in these products. Small amounts of high quality organic range-fed meats are better choice for the women with endometriosis.

- **Sweets and other foods with high glycemic index.** These foods will raise insulin levels, increase estrogen dominance, and may cause endometriosis. It is also imperative to eat a breakfast containing good quality protein, fats, and carbohydrates in combination to avoid hypoglycemic stress–induced cortisol and epinephrine elevations, which via gluconeogenesis will deplete lean muscle and increase the tendency for insulin resistance.

- **Alcohol.** Alcohol is all right if consumed in moderation. Studies show that women consuming more than five alcoholic drinks per week have a higher risk of breast cancer. This increase is probably due to the effect of alcohol on detoxification of estrogens.
• **Caffeine.** Studies have shown that caffeine increases production of the estrogen, especially estradiol. Caffeine also interferes with the liver’s ability to metabolize excessive estrogen in the body, causing increase in serum level estrogen. Organic coffee in moderation (1 to 2 cups per day) is safe.

• **Artificial ingredients, colorings, flavorings, and preservatives** should be eliminated.

• **Margarines and other sources of trans fatty acids** are likewise unhealthy and must be avoided.

### Massage Therapy

• **Reproductive organ massage.** Reproductive organ massage is a highly specialized form of therapeutic massage that manipulates the fascia of pelvic cavity. The purpose of the massage is to unblock any obstructions, reduce any adhesions in the reproductive organs, and improve the blood flow to the reproductive organs. Reproductive organ massage can help balance hormonal level, improve ovarian production and ovulation, and regulate menstrual cycles.

• **Tui Na.** Tui Na is a therapeutic massage modality practiced for many centuries. It was initially developed to set broken and dislocated bones, restore structural alignment and was later expanded to treat many more conditions. Endometriosis patients with back pain, neck stiffness, body aches, emotional tension, and headaches are advised to receive Tui Na therapy.

• **Castor oil packs.** Applying warm castor oil on the lower abdomen 2-3 times per day to invigorate the blood, assist the lymphatic symptom and balance hormone levels.

### Mind-Body Therapy

Meditation is often recommended to the patients in order to create emotional flexibility by ‘staying in the moment’. Exercise of all kinds has been shown to reduce the harmful effects of stress. Living in the present moment, we reduce stress that comes from worrying about a possible future that may never come and from fretting about a past that cannot be changed. This stress, which raises cortisol levels and lowers dehydroepiandrosterone (DHEA) levels, contributes to estrogen dominance by ‘stealing’ progesterone to produce more cortisol. Exercises like stretching and yoga not only help maintain physical flexibility, but also promote emotional flexibility.

Qi Gong is a practice of specific breathing techniques combined with movement and visualization in order to strengthen vitality, promote longevity and prevent diseases. This meditative exercise has been practiced in China for thousands of years and is currently practiced by millions of people in China and around the world. In the last forty years, many medical and research institutions throughout China have been using Qi Gong for rehabilitation, pain management and cancer treatment. In endometriosis treatments, regular Qi Gong exercise has been found to be effective in managing intense pelvic pain as well as increasing energy level.

### Lifestyle Modification
• **Aerobic exercise.** Aerobic exercise consumes oxygen and helps to burn carbohydrates. This exercise is exemplified by running, fast walking, and swimming. Because carbohydrates are consumed during aerobic exercise, it is associated with improvement in insulin resistance and sugar utilization as well as hormone balance.

• **Anaerobic exercise.** Anaerobic exercise classically uses fats as an energy source. That is why weight trainers consume medium-chain triglycerides during their workouts. Weight training also helps balance hormones such as growth hormone and testosterone. Because fat cells (adipocytes) are known to produce inflammatory mediators and estrogens, limiting them will also reduce estrogen dominance. Regular, moderate exercises help improve circulation and ease symptoms. However, inversion techniques and abdominal core work during menstruation should be avoided.

• **Use natural cotton pads.** Avoid tampons and switch to natural cotton maxi-pads. Tampons may increase retrograde menstrual flow by blocking the regular expulsion of menstrual blood, and they are often bleached with chlorine, a dioxin.

• **Minimize exposure to xenoestrogens in the environment.** Do not microwave food in plastic wrap or containers, and try to minimize the use of plastics for food storage.

• Avoid intercourse during menstruation for the same reason listed above.

• Rest and wear loose, comfortable clothing.

• Take warm baths (with aromatherapy if you wish).

**References**


